

Mathematics, Grade 8

- 34 Which equation states a rule for the pattern shown in the table below?

Input (x)	1	2	3	4
Output (y)	1	5	11	19

- A. $y = x^2 - x + 1$
- B. $y = x^2 + x - 1$
- C. $y = x^2 + 3$
- D. $y = x^2 + 1$

Reporting Category for Item 34: *Patterns, Relations, and Algebra*

- 35 In the equation shown below, x represents a positive real number.

$$y = \frac{100}{x} + 50$$

As the value of x gets larger, what happens to the value of y ?

- A. The value of y stays the same.
- B. The value of y increases.
- C. The value of y approaches 50.
- D. The value of y approaches 100.

Reporting Category for Item 35: *Patterns, Relations, and Algebra*

- 36 Which is equivalent to $p \div \frac{1}{10}$?

- A. $10p$
- B. $0.1p$
- C. $\frac{p}{10}$
- D. $0.01p$

Reporting Category for Item 36: *Number Sense and Operations*